

AMENDMENTS TO THE CLAIMS

1. (currently amended) A method for preparing an optical fiber, comprising the steps of:

applying a liquid composition of an electron beam-curable resin to a bare optical fiber or a coated optical fiber having a primary or secondary coating on a bare optical fiber,

irradiating electron beams to the resin composition on the optical fiber for curing while the optical fiber passes a zone under substantially atmospheric pressure, and

providing a magnetic field having a magnetic flux density of at least 0.1 T in the zone for thereby improving the efficiency of electron irradiation.

2. (cancelled).

3. (original) The method of claim 1 wherein the zone has an inert gas atmosphere.

4. (original) The method of claim 3 wherein the inert gas is helium.

5. (original) The method of claim 1 wherein the electron beams have been accelerated at a voltage of 60 to 160 kV.

6. (original) The method of claim 1 wherein the liquid composition comprises a polyether urethane acrylate oligomer and a reactive diluent.

7. (currently amended) A method for preparing an optical fiber, comprising the steps of:

applying a liquid composition of an electron beam-curable resin to a bare optical fiber or a coated optical fiber having a primary or secondary coating on a bare optical fiber,

irradiating electron beams to the resin composition on the optical fiber for curing while the optical fiber passes a zone under substantially atmospheric pressure, and

providing an electric field having an electric field strength of at least 0.1 KV/mm and a magnetic field having a magnetic flux density of at least 0.01 T in the zone so that the electron beams pass across the electric field and the magnetic field to two-dimensionally converge on the optical fiber.

8. (original) The method of claim 7 wherein the magnetic field has a direction parallel to the path of the optical fiber, and the electric field has a direction perpendicular to the path of the optical fiber.

9. (original) The method of claim 7 wherein the zone has an inert gas atmosphere.

10. (original) The method of claim 9 wherein the inert gas is helium.

11. (original) The method of claim 7 wherein the electron beams have been accelerated at a voltage of 60 to 160 kV.

12. (original) The method of claim 7 wherein the liquid composition comprises a polyether urethane acrylate oligomer and a reactive diluent.